## JURISDICTIONAL DISPARITIES IN PROGRESS TOWARDS IMPROVING THE CASCADE OF CARE FOR CHRONIC HEPATITIS B IN AUSTRALIA

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**Background:** Australia is not on track to reach the National Strategy 2022 targets or the WHO's 2030 elimination targets, and further information is needed regarding the disparities in progress toward these goals. We explore jurisdictional differences in the cascade of care for chronic hepatitis B (CHB) over time and quantify the potential impact of increasing treatment uptake across Australian jurisdictions.

**Methods:** An adapted mathematical model of the population impact of CHB in Australia was developed, combined with notifiable disease surveillance records, viral load testing data and antiviral treatment data. We derived state- and territory-specific estimates of the cascade of care for CHB over time in Australia, and selected scenarios were modelled to quantify the potential impact of increasing treatment uptake in jurisdictions.

**Results:** The estimated prevalence of CHB in 2019 ranged widely across Australian states and territories, from 0.3% (TAS) to 1.8% (NT). The proportion diagnosed has increased in all jurisdictions since 2010 (except for ACT) and in 2019 ranged from 48.7% (TAS) to 78.7% (NSW). The proportion in care declined in some jurisdictions and in 2019 ranged from 9.7% (WA) to 26.7% (NSW), with the proportion of all those living with CHB receiving antiviral treatment ranging from 5.4% (TAS) to 12.4% (NSW). None of the jurisdictions were predicted to meet the 2022 treatment target of 20% before 2050; however, under an optimistic scenario, reaching the target would be possible between 2031 and 2035. However, this would require a significant (2-fold or 3-fold) increase in treatment uptake from 2020 onwards.

**Conclusion:** The gaps in the cascade of care for CHB differ between jurisdictions, and the rate of improvement over time varies widely. Adopting an express equity focus and reducing these disparities will require intensified approaches at local and jurisdictional levels in addition to collective nationwide efforts.

Disclosure of Interest Statement: We have no conflicts of interest to disclose.